

PLANNING FOR INNOVATION AND DISRUPTION IN A GLOBAL ENVIRONMENT

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ABSTRACT

Higher education faces its greatest combinations of challenges: economic uncertainty, accountability and globalization: overlaid by emerging technologies. University leaders face the twin trials of dramatic decreases in public financial support and the increasing cost of resources to avoid technological obsolescence. Technologies continue to evolve that will disrupt higher education in the future. The challenge for traditional universities whose concentration historically has been the production of knowledge in the form of human capital, research, and scholarship is to be able to tap into the expanding need for lifelong learning. Access to higher education will be a necessity for job mobility and economic success. Survival for universities requires modification and adaptation. Traditional educational paradigms have changed and the physical university is now a combination multi-dimensional education model. All these changes demand planning, specifically strategic planning, if higher education institutions are to be competitive and ultimately successful.

THE CHANGING LANDSCAPE OF HIGHER EDUCATION

Higher education has faced many challenges since its meager inception (Altbach, 2004). However, higher education today faces its greatest combinations of challenges: economic uncertainty, accountability and globalization overlaid by emerging technologies that are intimidating to learn and formidable to administer (Rabah, 2016; Tierney, 2014). Higher education institutions are attempting to develop the capacity to adapt and modify to the new models of knowledge and information (Lane, Lemoine, Tinney & Richardson, 2014). Therefore higher education is often depicted as an “industry,” operating in a highly competitive global marketplace (Marginson, 2006).

The challenge for traditional universities whose concentration historically has been the production of knowledge in the form of human capital, research, and scholarship is to access the expanding need for lifelong learning in a digital economy (Guri-Rosenblit, Sebkova & Teichler, 2007; Staley & Trinkle, 2011). While the need for education is growing, the sustainability of all the forms of postsecondary education is a concern (Duderstadt, 2000; Graves, 2010). “In all modern contexts”, Graves (2010) points out, “education is now the primary vehicle for practicing

the principle of social equity (by enabling equal opportunity) and for ensuring collective socioeconomic security and ensuring against its collapse” (p. 28).

Higher education is at a defining moment in America facing challenges from all aspects of society (Lemoine, Hackett & Richardson, 2016b). Listening to the discussion of today, one senses that very few people in America are content with the higher educational system (Slater, 2015). Rising costs, uncertainty of jobs following graduation and questions concerning the continued value of higher education contribute to a chorus expressing concern about the future and sustainability of higher education in America (Bonk, 2009). Why has this phenomenon occurred? Many in higher education have not responded to the threats of globalization, innovation and disruption (Altbach & Knight, 2007; Demillo, 2015). In the middle of the twentieth century, American education was the envy of the world, but today it ranks below most of the industrialized nations of the world (Pucciarelli & Kaplan, 2016). Organizational and political leaders should address the concerns and plan for a changing, dynamic, and multidimensional future to be globally and locally competitive (Alagaraja & Li, 2015; McClure, 2016).

Economic considerations related to international competitiveness have become a significant stimulus behind the internationalization of higher education. Education is increasingly seen not only as an export commodity, but also as a key national brand for a nation’s knowledge proficiency (Lane & Maznevski, 2014).

The VUCA World

VUCA, volatility, uncertainty, complexity, ambiguity, terms coined for the military world also describe today’s higher education world (Lemoine, Hackett & Richardson, 2016a). VUCA describes today’s chaotic, turbulent, and rapidly changing higher education environment, which Ansell (2015) suggests is the new educational normal. The financial crisis of 2008-2009, for example, rendered many businesses obsolete, and organizations throughout the world were plunged into turbulent economic environments (Lichy & Birch, 2016). At the same time, rapid changes marched forward as technological developments like social media exploded (Charbonneau-Gowdy, 2017; Garrison & Akyol, 2009; Kaplan & Haenlein, 2016), the world’s population continued to simultaneously grow and age and move (Benneworth & Cunha, 2015; Dolphin, 2015), and global disasters disrupted lives, economies, businesses, and education (Altbach, 2004; Carlisle & McMillan, 2017; Guile, 2001; Hemsley-Brown & Oplatka, 2006).

Higher education leaders in the VUCA world have to be activists, adaptive and flexible (Marshall, 2010; Morris, 2009). VUCA leaders confront social, cultural and educational problems that are often deeply divisive (Tierney & Lanford, 2016). VUCA leaders must build the capacity to address economically disadvantaged students who may be homeless, have a different religious background and culture, speak a different language, and arrive at school with differing abilities to learn (Mense, Fulwiler, Richardson & Lane, 2011). And, VUCA leaders must come to terms with society’s contradicting ideas of equity and diversity (Woodall, Hiller & Resnick, 2014).

To be successful and effective higher education institutions need VUCA leaders who are decision-makers and courageous when dealing with the uncertainty of change (Hackett, Lemoine & Richardson, 2016). Sorting out the complexity of issues is a constant challenge; there is no normality except change (Levine, 2014). Educational leaders must act and take responsibility for the volatility and pressures for complex change, and realize change will bring ambiguity and challenges that come with setbacks, stress, and crises (Leon & Price 2016). When globalization is added to the VUCA environment, it changes the world’s economy, increases diversity, and helps create the ubiquitous use of technology which has a tremendous effect on higher education (Hackett, Lemoine & Richardson, 2016; Moodie, 2016; Pinherio & Antonowicz, 2015).

INNOVATION AND HIGHER EDUCATION

Innovation is not a new concept of higher education. Current discussions about "innovation" may be more passionate, but innovation has long been a hallmark of American academic institutions (Tapscott & Williams, 2010). Innovation is often described as a multi-stage process whereby institutions transform ideas into new service or processes, in order or gain competitive advantage in the marketplace (Baregheh, Rowley, & Sambrook, 2009).

The innovations happening today, globalization and technology are great examples, more threatening and intimidating than those of recent years. Innovations in technology for example, have created a world market place to compete with the local market place (Serdyukov & Serdyukov, 2017). Innovations in the delivery of instruction and knowledge have led to borderless educational opportunities (Blin & Munro, 2008). The consequences of these innovations are more far-reaching than ever before, challenging established institutions and the very future of higher education (Bates, 2010).

These innovations are challenging higher education institutions to remain relevant in a rapidly changing global landscape (Brewer & Tierney, 2011; Proenza, 2010). New and innovative technology makes the world global, but most institutions are required to sustain their local stakeholders (Hearn & Warshaw, 2015). The low adoption rates for many innovations have increased costs and negatively affected productivity (Keo & Jun, 2016). Failure to implement an innovation can become expensive with dire short-term and long-term organizational consequences (Gobble, 2016). The biggest obstacle blocking true innovation in higher education is the absence of reliable techniques to judge and monitor instructional quality (Flavin, 2016).

DISRUPTION AND HIGHER EDUCATION

Disruption is not a new concept but has become one of the latest "buzz" words surrounding higher education. A "disruptive innovation," defined by Christensen and Eyring (2011), is "a process that allows a simple, affordable, and accessible product to replace a product that is complex, expensive, and inaccessible, even if the initial quality of the new product is inferior" (Casares, Dickson, Hannigan, Hinton, & Phelps, 2013, p. 11). The authors argue that technologies will keep evolving and will continue to disrupt higher education.

Higher education institutions are facing decreased funding during a time of scarce resources yet increased accountability for productivity in the development and articulation of knowledge (Jain & Purswani, 2016). Duderstadt (2000) suggested newer university roles are "an engine for economic growth through the generation and application of new knowledge" (p. 5). Colleges and universities are regarded as *a place to go*, land-based institutions where the uninformed meet teachers in a face-to-face setting to become informed (Lane, Kehr & Richardson, 2009). Students emerge from traditional universities, certificated and credentialed, with necessary tools for upward social and economic mobility (Westberry, McNaughton, Billo & Gaeta, 2015). However, technology has disrupted the traditional, formal processes of higher education (Bass & Eynon, 2017; Christensen & Eyring, 2011; Christensen, Horn, Caldera, & Soares, 2011) and e-Learning 2.0 expertise acquired from virtual class participation does not fit the traditional brick and mortar campus model (Weller & Anderson, 2013).

Traditional university educations are costly and one disruptive innovation, technology, has forced changes to existing higher education models (Christensen, Horn, Caldera, & Soares, 2011). Higher education leaders are forced to objectify, measure, and quantify persons, programs, and processes, often without the input derived from planning (Altback & Salmi, 2016). This discrepancy of quantity over quality creates an unhealthy ethos in the educational institution that threatens to destroy the very persons and programs that planning should assist (Carillo, 2016; Siu & Garcia, 2017).

Externally driven forces have subjected America's higher education institutions to demands for accountability that have not proven to be effective (Chan, Hackett, Lemoine & Richardson, 2016). Irrespective of the ineffectiveness, numerous states, particularly popularly elected state politicians, have advocated strong external accountability without understanding the low organizational capacity of the educational institutions to deliver critical productivity (Christensen, Bartman & Van Bever, 2016). The size of the accountability movement indicates that the survival of public higher education may very well hinge on the ability of educators to demonstrate productivity and accountability in a chaotic marketplace characterized by innovation and disruption (Craig, 2015; Downes & Nunes, 2014; Etzkowitz, 2003).

Technology has transformed higher education and students can take classes in Abu Dhabi, London, Los Angeles, or at a local community college, regional college, state university, or private university (Flavin, 2017). The Internet has changed the world from an industrial economy to a digital economy (Gargano & Throop, 2017). Higher education is increasingly seen not only as an export commodity, but also as a key national brand for a nation's knowledge proficiency (Lemoine, Greer, Hackett & Richardson, 2016). Knowledge institutions, whether private or public, are regarded as significant contributors to a country's global and local competitiveness (Greenwood, Hinings & Whetten, 2014).

As learning becomes increasingly borderless, higher education is likely to rank increasingly high on national agendas primarily for knowledge production and economic incentives (Lanford, 2016; Lemoine & Richardson, 2015). Developing countries view increasing higher education participation as crucial to their transition to developed country standing while developed countries view high education as a primary driver of economic viability (Guri-Rosenblit, 2010; Meister-Scheytt & Scheytt, 2005).

IS THERE A MEANS FOR ADDRESSING THESE INNOVATIONS AND DISRUPTIONS?

Planning is a fundamental key to current and future success for higher education, particularly in this age of innovation and disruption (Abdallah & Langley, 2013). However, many educational leaders often overlook and fail to use planning as a prelude to designing and implementing sustainability and productivity procedures for success in the globalized marketplace (Wheelen & Hunger, 2012). Today's educational leaders need to understand and embrace planning as essential to their personal success and the success of their institution (Teichler, 2006). In today's environment, the globalization of the 21st century fuels the current interest in planning because success or failure will determine the future of American society, and the world (Glendinning, 2014). However, in most higher education institutions there exists an incongruity between the expectations of outside agencies and the realities of higher education (Chance & Williams, 2015). This discrepancy can be addressed by organized planning.

The long-range goal of planning is to enhance productivity (Daft, 2010). A second powerful application of planning is comparing productivity across individuals, schools, universities and even competitors in private schools (Abraham, 2012). Planning is necessary to measure quantitatively the investment of education because education is about the utilization of resources. In practical planning measures, an output represents results. Efficiency and effectiveness must work together for higher educational organizations to be successful or at least sustainable. Institutions can temporarily survive without perfect efficiency; they usually die if they are ineffective. Efficiency typically implies a short-term response to change, while effectiveness specifies a long-term reaction (Drucker, 1993). According to Kohn (2000), "it is easier to measure efficiency than effectiveness, easier to rate how well we're doing something than to ask whether what we're doing makes sense" (pp. 3-4). Drucker (1974) stated, "Effectiveness is concerned with doing the right things. Efficiency is doing things right" (p. 45).

Planning gives a higher education institution the evidence and direction required to make substantial changes to enhance productivity (Aquino, 2014). Change is difficult and often produces unintended results. Educational leaders must examine organizational capacity to meet resource demands, in light of problems on university employees (Letizia, 2017). Consequently, higher education leaders need to understand and use planning, know their organizational capacity, and be able to articulate clearly, the role planning plays in their organization. Planning should be understood and used in relation to contextual reality of higher education and not just in the abstract thinking of theorists and politicians (Rothaermel, 2015).

Planning forces higher education leaders to work smarter and that concept should carry over to all employees (Wilkinson & Eacott, 2013). Leaders must empower people at the lowest levels in the institution to decide how they can best do their jobs. Empowering the people who know their work the best is one way of accomplishing "working smarter" objectives (Saxena, 2013). Leaders realize that the people, who best know how to do jobs more efficiently, are those who are doing those jobs right. Such is the essence of strategic planning, involving employees to help plan the work and the outcomes necessary for success. The most practical approach to facilitating adoption and promoting usage of planning is involvement (Mbugua & Rarieya, 2014)

"Inputs" is the term used to define the resources consumed in the production of outputs. Thus, inputs include all the tangible resources consumed (materials, supplies, and so forth), the services that support production (heat, light, space, rentals, computer time, and so forth), and the effort or labor of people who use these resources to actually produce the output. Even though the term "input" includes all these various resources and expenses, typical productivity measures commonly uses ones, or a few, major inputs. Regardless of the level of planning analysis, outputs and output quality must be measured, and are compared to measured input consumption (Knight, 2014).

Educational planning requires that large, complex phenomena be "reduced" to objective, operational, and measurable concepts that can be displayed as quantitative expression for everyone to understand (Hayward, 2008). Single measures rarely, if ever, reflect the true state of things, as there are always multiple interests, goals, and values. It is possible to produce highly accurate and sensitive measures, inputs or outputs, but if these measures are not useful in helping people in higher education organizations make effective changes that result in productivity improvements, then that planning is useless (Chance, 2010).

STRATEGIC PLANNING

Strategic planning is a rational, systemic, and systematic process that requires higher education leaders to state the goals of the organization, how to attain the goals, and provide the criteria for planning, designing, developing, implementing, and evaluating plans, programs and processes (Harris, Moynahan, Vickery, Henriksen, Morello & Kasemir, 2017). Strategic planning can be defined as the process by which an organization makes decisions and takes actions to enhance its long-term performance (Ololube, Aiya, Uriah & Ololube, 2016). A strategic plan identifies the markets in which the higher education institution competes, as well as the ways in which it competes. In most strategic planning the end result is to obtain competitive advantage in the marketplace (Hinton, 2012; Wolf & Floyd, 2013). The fundamental purpose of strategic planning is to transition the institution from present status to some desired future and, in the process, to develop a substantial competitive advantage over its competition (Hill & Jones, 2013). Though the process of investigating strengths, weaknesses, and current opportunities and threats inside and outside the institution, the university leaders can ascertain the current status of the institution (Kaufman & Herman, 1991). The comparison between desired and existing situations clarifies the institution's needs related to resources. From these determinations operational programs are developed and implemented (Hu, Liu, Chen & Qin, 2017).

Strategic planning is based on the exploration of known or predicted trends, and is flexible and oriented toward achieving desired outcomes. So, strategic planning is the ideal tool for higher education leaders to use when confronting the innovations and disruptions (Hinton, 2012; Pisel, 2008).

What are the essential components of strategic planning and what makes it a technique of choice for higher education leaders? The following chart illustrates the essential phases in strategic planning.

Phases In The Strategic Planning Process

1. Initiate and develop agreement on a strategic planning protocols and process
2. Clarify mission, vision, goals and values
3. Identify organizational mandates; both internal and external
4. Assess the external environment strengths and weaknesses (PEST)
5. Assess the internal environment strengths and weaknesses (SWOT)
6. Identify the strategic issues facing the institution and formulate strategies to manage the issues
7. Establish a desired future for the institution.

Strategic planning is a valuable tool for effective response to innovation and disruption and to competently respond to these challenges (Bieler & McKenzie, 2017). As a management tool strategic planning enhances the institution's ability to move from short-term planning that is crisis-driven to broader strategic processes essential for sustainability (Butuner, 2016; Paliulis & Labanauskis, 2015). The data-based decision making inherent to strategic planning enables leaders to capture a holistic assessment of the institution's strengths and weaknesses (Cheng 2013; Davies & Davies 2010). With such information and data leaders have a reliable process to proceed with changes that are necessary for the institution to respond to the myriad of innovations and disruptions. Thus the process provides an inclusive way for facilitating communication with the multitude of stakeholder groups for involvement in planning and ultimately changes. Hence, it has the potential to enhance collaborative and collegial working relationships among all responsible parties (Chang, 2008).

Most higher education leaders spend their time planning means and not final output goals (Kaufman, Herman & Watters, 1996). Higher education institutions must assist faculty, staff and students to become successful in a world that demands knowledge, critical thought, problem solving, and competence (Kaufman et al., 1996). Continuing to allocate resources for the current system is to deny the changing conditions involving higher education in society. Reality demands administrators rethink and re-plan so higher education today can produce citizens of tomorrow. Drucker (2014) warned that continuing the current mode of planning and operation would simply make organizations better and better at doing what they have been doing. And to paraphrase Einstein, we are stupid to continue doing the same time and expect different results. Planning for innovation and disruption will help transport the institution toward a desired future, not stagnation.

In 1983, Lewis stated:

Recognizing the dynamic forces of change in global higher education, three assumptions can be made about the future:

1. It will differ from the past.
2. It will be difficult to predict.
3. The rate of change will be faster than ever before. (p. 3-4)

Drucker (1993) stated, "But one thing we can predict: the greatest change will be the change in knowledge in its form and content; in its meaning; in its responsibility; and in what it

means to be an educated person” (p. 218). In addition, Kaufman, Herman and Watters (1996) cited Albert Einstein’s observation that the world is characterized by a proliferation of means and a confusion of goals.

Universities must adopt appropriate strategies or experience losses in competitiveness, students, resources, and compromise their future (Delprino, 2013). Strategic planning involves environmental scanning (both external and internal), strategy formulation (strategic or long-range planning), strategy implementation, and evaluation (Strike, Hanlon, & Foster, 2017). The study of strategic planning, therefore, emphasizes the monitoring and evaluating of internal and external opportunities and threats in light of the institution’s perceived strengths and weaknesses. Strategic planning should be primarily concerned with the long-term future of the institution through the creation and maintenance of a competitive advantage leading to a favorable market position (Macfadyan & Dawson, 2012). Strategic planning demands analysis and decisions to formulate and execute policies to provide a competitive connection between the institution and its environment in such a manner for the institution to achieve organizational goals (Kealey, Peterson, Thompson & Waters, 2015).

Drucker (1993) stressed that:

To turn around any institution-whether a business, a labor union, a university, a hospital, or a government-requires always the same three steps:

1. Abandonment of the things that do not work, the things that have ever worked; the things that have outlived their usefulness and their capacity to contribute;
2. Concentration on the things that do work, the things that produce results, the things that improve the organization’s ability to perform; and
3. Analysis of the half-successes, the half-failures

A turn-around requires abandoning whatever does not perform and doing more of whatever does perform. (p. 160)

Drucker’s points are the essence of strategic planning. A careful examination of the institution requires objective analysis of all components and then making decisions about what can and should be done by the institution to successfully meet the threats of innovation and disruption facing higher education. Leaders should be strategic planners and compete in a continually changing and technologically impacted environment (Ololube, Aiya, Uriah & Ololube, 2016). Educational strategic planning creates a better future for individual, groups, organizations, and society (Bass & Eynon, 2017).

Finally, before the higher education institution can be structured to meet the educational challenges of the day, a decision must be made on what the challenges are, that is a necessary, functional component of strategic planning (Zhao, 2015). Today’s fast-changing global environment dedicated to technological innovation brings increased competition for higher education institutions as they struggle with decreased funding, reduced numbers of students, and declining public and political support resulting from innovation and disruption. In the current knowledge based economy, higher education institutions are facing dilemmas and pressures from every direction with no end in sight (Bieler & McKenzie, 2017). How can higher education chart a path to productivity and sustainability? Strategic planning would appear to be an important tool for institutions to use to adapt themselves to the global influences of innovation and disruption in order to achieve their desired future. Desire for survival in this competitive environment makes these institutions utilize strategic planning to increase their ability to modify and adapt in this rapidly changing global environment (Fleishchmann & Koberstein, 2015).

CONCLUDING THOUGHTS

It appears that higher education has not fully grasped the concept that all society's goals have some form of an economic content. In any society, the economy is essential. The function of higher education must be to educate individuals to function in a knowledge society by providing economic benefit to society. In order to accomplish this vision educational organization must turn around from today's practice and take additional approaches in achieving their societal visions. With constant change, educational leaders will need to be tough, courageous, know their own strengths, and be able to capitalize and build strong supportive relationships. Educational leaders will need to have fortitude to take increasing pressures to perform and realization that challenges inevitably bring setbacks, stress, and crises. Leadership is a process, not an event, and leadership skill sets can be taught.

Higher education must adapt or get left behind. Higher education reform is an ongoing discussion focused on ways and means to survive and thrive in this changing environment dictated by innovation and disruption. However, many institutions are disrupting themselves from the inside out as they attempt to deal with challenges without using techniques such as strategic planning to help inform their decision. True disruption occurs when existing institutions fail to embrace the forces of transformation.

Conceptually, higher education reform revolves around planning for today and more importantly for tomorrow. Planning is a future oriented concept that incorporates past history, present performance, and future direction to achieve organizational mission and objectives. Managing an educational organization to achieve acceptable performance standards requires the education leader to examine the relationships between planning and policy to achieve success.

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